# 1 Introduction

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*Mallards are one of the common waterfowl species on district lands.*

The U.S. Fish and Wildlife Service (Service) has developed a draft comprehensive conservation plan (CCP) to provide the foundation for the management and use of nine wetland management districts (districts) in North Dakota (see figure 1, vicinity map):

- Arrowwood Wetland Management District
- Audubon Wetland Management District
- Chase Lake Wetland Management District
- Crosby Wetland Management District
- Devils Lake Wetland Management District
- J. Clark Salyer Wetland Management District
- Kulm Wetland Management District
- Lostwood Wetland Management District

The draft CCP was developed in compliance with the National Wildlife Refuge System Improvement Act of 1997 (Improvement Act) and Part 602 (National Wildlife Refuge System Planning) of "The Fish and Wildlife Service Manual." The actions described within this draft CCP and environmental assessment (EA) meet the requirements of the National Environmental Policy Act of 1969 (NEPA). Compliance with the NEPA is being achieved through involvement of the public.

A planning team of representatives from various Service programs including the divisions of realty, visitor services, and resources; and the North Dakota Game and Fish Department (NDGF) prepared the draft CCP and EA. In addition, the planning team used public input. Public involvement and the planning process are described in section 1.6, "The Planning Process."

After reviewing a wide range of public comments and management needs, the planning team developed alternatives for management of the districts. The team recommended one alternative to be the Service's proposed action, which addresses all substantive issues while determining how best to achieve the purposes of the districts. The proposed action is the Service's recommended course of action for management of the districts. "Chapter 3, Alternatives" summarizes the proposed action, with its predicted effects described in "Chapter 5, Environmental Consequences." The details of the proposed action compose the draft CCP (chapter 6).

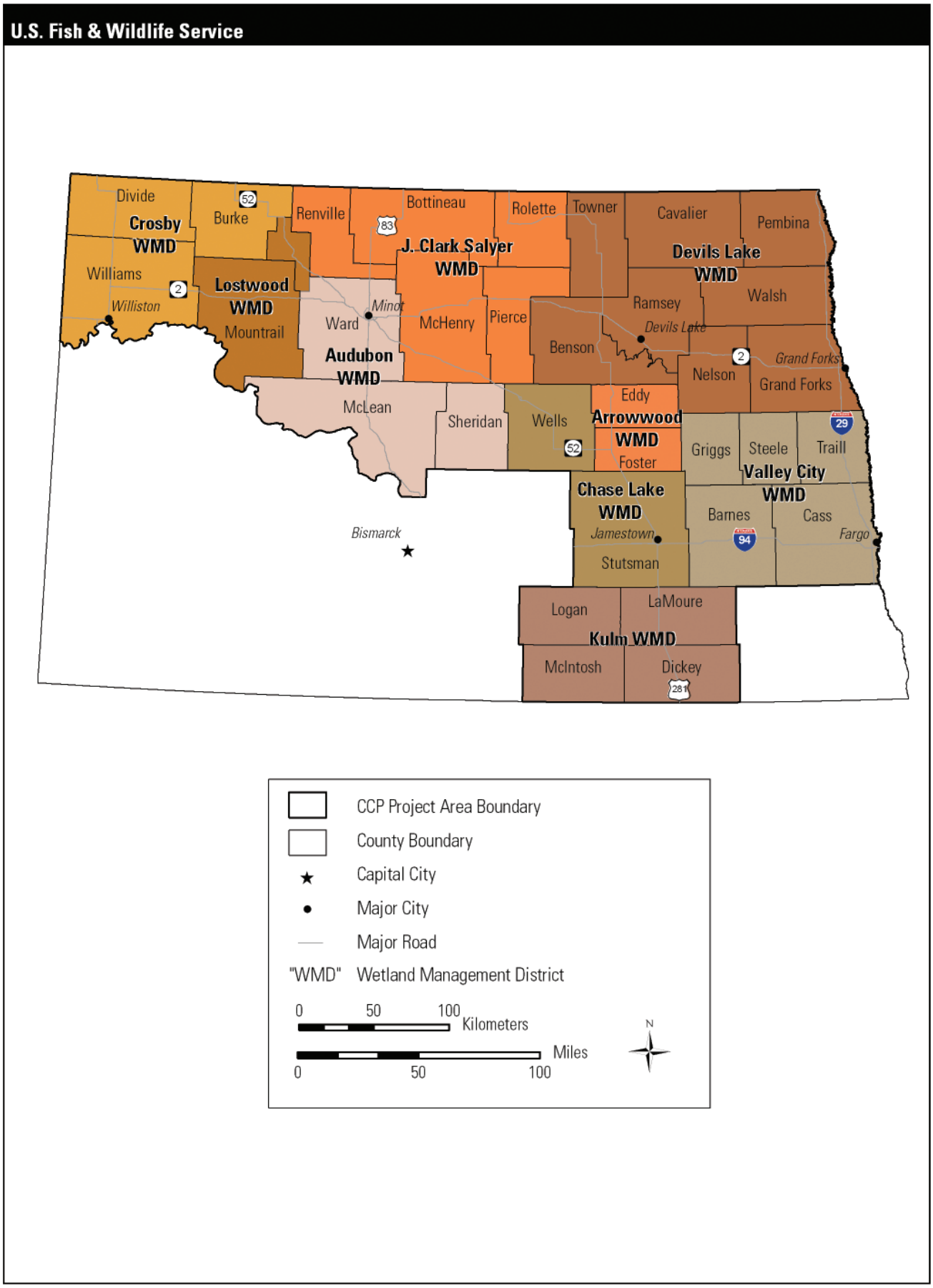



**Figure 1. Vicinity map of the nine districts, North Dakota.**

When finalized, the CCP will serve as a working guide for management programs and actions for the next 15 years. The final CCP will specify the necessary actions to achieve the vision and purposes of the nine North Dakota districts. Wildlife is the first priority in district management, and the Service allows and encourages public use (wildlife-dependent recreation) as long as it is compatible with the districts' purposes.

## 1.1 Purpose and Need for the Plan

The purpose of the draft CCP is to identify the role that the districts would play in support of the mission of the National Wildlife Refuge System (Refuge System) and to provide long-term guidance for management of districts programs and activities.

The CCP is needed

to communicate with the public and other partners in efforts to carry out the mission of the Refuge System;

to provide a clear statement of direction for management of the districts;

to provide neighbors, visitors, and government officials with an understanding of the Service's management actions on and around the districts;

to ensure that the Service's management actions are consistent with the mandates of the Improvement Act;

to ensure that management of the districts is consistent with federal, state, and county plans;

to provide a basis for development of budget requests for the districts' operation, maintenance, and capital improvement needs.

Sustaining the nation's fish and wildlife resources is a task that can be accomplished only through the combined efforts of governments, businesses, and private citizens.

## 1.2 U.S. Fish and Wildlife Service and the Refuge System

The Service is the principal federal agency responsible for fish, wildlife, and plant conservation. The Refuge System is one of the Service's major programs.

### U.S. Fish and Wildlife Service

*The mission of the U.S. Fish and Wildlife Service, working with others, is to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of the American people.*

Over a century ago, America's fish and wildlife resources were declining at an alarming rate. Concerned citizens, scientists, and hunting and angling groups joined together to restore and sustain America's national wildlife heritage. This was the genesis of the U.S. Fish and Wildlife Service.

Today, the Service enforces federal wildlife laws, manages migratory bird populations, restores nationally significant fisheries, conserves and restores vital wildlife habitat, protects and recovers endangered species, and helps other governments with conservation efforts. In addition, the Service administers a federal aid program that distributes hundreds of millions of dollars to states for fish and wildlife restoration, boating access, hunter education, and related programs across America.

### Service Activities in North Dakota

Service activities in North Dakota contribute to the state's economy, ecosystems, and education programs. The following list describes the Service's presence and activities:

- Employed 169 people in North Dakota.
- Assisted by 539 volunteers who donated more than 10,200 hours with Service projects.
- Managed two national fish hatcheries and one fish and wildlife management assistance office.
- Managed 65 national wildlife refuges encompassing 343,145 acres (0.8% of the state).
- Managed 11 wetland management districts.
  - 284,660 acres of fee waterfowl production areas (WPAs) (0.6% of the state)
  - 1,080,636 wetland acres under various leases or conservation easements (2.4% of the state)
- Hosted more than 385,300 annual visitors to Service-managed lands.
  - 166,908 hunting visits
  - 59,500 fishing visits
  - 26,346 photography visits
- Provided $3.8 million to NDGF for sport fish restoration and $3.9 million for wildlife restoration and hunter education.

- Helped private landowners restore, create, and enhance more than 214,000 acres on 8,400 sites and restore 17 miles of river since 1987 through the Partners for Fish and Wildlife Program.
- Employed 11 Partners for Fish and Wildlife Program biologists.
- Paid North Dakota counties $435,325 under the Refuge Revenue Sharing Act (money used for schools and roads).

## National Wildlife Refuge System

In 1903, President Theodore Roosevelt designated the 5.5-acre Pelican Island in Florida as the nation's first wildlife refuge for the protection of brown pelicans and other native, nesting birds. This was the first time the federal government set aside land for wildlife. This small but significant designation was the beginning of the Refuge System.

One hundred years later, the Refuge System has become the largest collection of lands in the world specifically managed for wildlife, encompassing more than 96 million acres within 546 refuges and more than 3,000 small areas for waterfowl breeding and nesting. Today, there is at least one refuge in every state including Puerto Rico and the U.S. Virgin Islands.

In 1997, the Improvement Act established a clear mission for the Refuge System.

> *The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and, where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.*

The Improvement Act states that each national wildlife refuge (that is, each unit of the Refuge System, which includes wetland management districts) shall be managed

to fulfill the mission of the Refuge System;

to fulfill the individual purposes of each refuge and district;

to consider the needs of fish and wildlife first;

to fulfill the requirement of developing a CCP for each unit of the Refuge System and fully involve the public in the preparation of these plans;

to maintain the biological integrity, diversity, and environmental health of the Refuge System;

to recognize that wildlife-dependent recreation activities including hunting, fishing, wildlife observation, photography, and environmental education and interpretation are legitimate and priority public uses;

to retain the authority of refuge managers to determine compatible public uses.

In addition to the mission for the Refuge System, the habitat and wildlife vision for each unit of the Refuge System stresses the following principles:

- Wildlife comes first.
- Ecosystems, biodiversity, and wilderness are vital concepts in refuge and district management.
- Habitats must be healthy.
- Growth of refuges and districts must be strategic.
- The Refuge System serves as a model for habitat management with broad participation from others.

Following passage of the Improvement Act, the Service immediately began to carry out the direction of the new legislation, including preparation of CCPs for all national wildlife refuges and wetland management districts. Consistent with the Improvement Act, the Service prepares all CCPs in conjunction with public involvement. Each refuge and each district is required to complete its CCP within the 15-year schedule (by 2012).

## People and the Refuge System

The nation's fish and wildlife heritage contributes to the quality of American lives and is an integral part of the country's greatness. Wildlife and wild places have always given people special opportunities to have fun, relax, and appreciate the natural world.

Whether through bird watching, fishing, hunting, photography, or other wildlife pursuits, wildlife recreation contributes millions of dollars to local economies. In 2002, approximately 35.5 million people visited the Refuge System, mostly to observe wildlife in their natural habitats. Visitors are most often accommodated through nature trails, auto tours, interpretive programs, and hunting and fishing opportunities. Significant economic benefits are generated in the local communities that surround refuges and wetland management districts. Economists report that Refuge System visitors contribute more than $792 million annually to local economies.

# 1.3 National and Regional Mandates

Refuge System units are managed to achieve the mission and goals of the Refuge System, along with the designated purpose of the refuges and districts (as described in establishing legislation, executive orders, or other establishing documents). Key concepts and guidance of the Refuge System are in the Refuge System Administration Act of 1966 (Administration Act), Title 50 of the *Code of Federal Regulations* (CFRs), "The Fish and Wildlife Service Manual," and the Improvement Act.

The Improvement Act amends the Administration Act by providing a unifying mission for the Refuge System, a new process for determining compatible public uses on refuges and districts, and a requirement that each refuge and district be managed under a CCP. The Improvement Act states that wildlife conservation is the priority for Refuge System lands and that the Secretary of the Interior will ensure that the biological integrity, diversity, and environmental health of refuge lands are maintained. Each refuge and district must be managed to fulfill the Refuge System's mission and the specific purposes for which it was established. The Improvement Act requires the Service to monitor the status and trends of fish, wildlife, and plants in each refuge and district.

A detailed description of these and other laws and executive orders that may affect the CCP or the Service's implementation of the CCP is in appendix A. Service policies on planning and day-to-day management of refuges and districts are in the "Refuge System Manual" and "The Fish and Wildlife Service Manual."

# 1.4 District Contributions to National and Regional Plans

The North Dakota districts contribute to the conservation efforts described in this section.

## Fulfilling the Promise

A 1999 report, "Fulfilling the Promise, The National Wildlife Refuge System" (U.S. Fish and Wildlife Service [USFWS] 1999), is the culmination of a yearlong process by teams of Service employees to evaluate the Refuge System nationwide. This report was the focus of the first national Refuge System conference (in 1998)—attended by refuge managers, other Service employees, and representatives from leading conservation organizations.

The report contains 42 recommendations packaged with three vision statements dealing with habitat and wildlife, people, and leadership. This CCP deals with all three of these major topics. The planning team looked to the recommendations in the document for guidance during CCP planning.

## Bird Conservation

"All-bird" conservation planning in North America is being achieved through the North American Bird Conservation Initiative (NABCI). Started in 1999, the NABCI committee is a coalition of government agencies, private organizations, and bird initiatives in the United States working to advance integrated bird conservation based on sound science and cost-effective management that will benefit all birds in all habitats. Conservation of all birds is being accomplished under four planning initiatives: the North American Landbird Conservation Plan (Partners in Flight), the U.S. Shorebird Conservation Plan, the North American Waterbird Conservation Plan, and the North American Waterfowl Management Plan.

## Partners in Flight

The Partners in Flight program (PIF) began in 1990 with the recognition of declining population levels of many migratory bird species. The challenge, according to the program, is managing human population growth while maintaining functional natural ecosystems. To meet this challenge, PIF worked to identify priority, land bird species and habitat types. PIF activity has resulted in 52 bird conservation plans covering the continental United States.

The primary goal of PIF is to provide for the long-term health of the bird life of this continent. The first priority is to prevent the rarest species from going extinct. The second priority is to prevent uncommon species from descending into threatened status. The third priority is to "keep common birds common."

PIF splits North America into seven avifaunal biomes (birds of an ecological regional area) and 37 bird conservation regions (BCRs) for planning purposes (see figure 2, map of BCRs). The nine wetland management districts are within the "prairie avifaunal biome" in BCR 11, the Prairie Pothole Region.

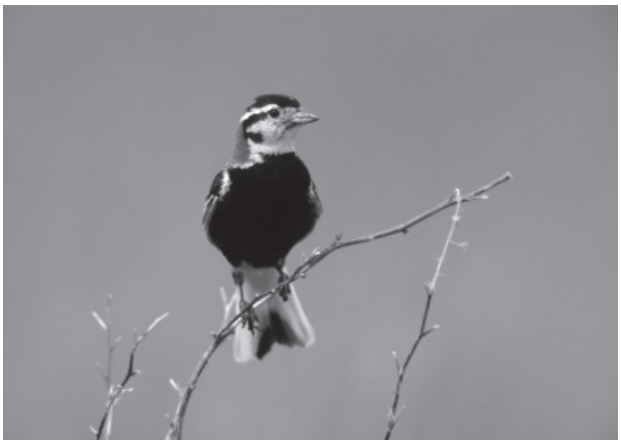
BCR 11 is the most important waterfowl production area on the North American continent, despite extensive wetland drainage and tillage of native grasslands. The density of breeding dabbling ducks commonly exceeds 100 pairs per square mile in some areas during years with favorable wetland conditions. The area comprises the core of the breeding range of most dabbling duck and several diving duck species. BCR 11 provides critical breeding and migration habitat for more than 200 other bird species, including such species of concern as Franklin's gull and yellow rail and a threatened species, the piping plover. In addition, Baird's sparrow, Sprague's pipit, chestnut-collared longspur, Wilson's phalarope, marbled godwit, and American avocet are among the many priority nonwaterfowl species that breed in BCR 11. According to the NABCI, wetland areas also provide key spring migration sites for Hudsonian godwit, American golden-plover, white-rumped sandpiper, and buff-breasted sandpiper.

PIF conservation priorities in the prairie avifaunal biome focus on protection of remaining prairies, management of existing grasslands with fire and grazing, and control of invasive plants including woody plant encroachment.

## North American Waterfowl Management Plan

Written in 1986, the North American Waterfowl Management Plan envisioned a 15-year effort to achieve landscape conditions that could sustain waterfowl populations. Specific objectives of the plan are to increase and restore duck populations to the average levels of the 1970s—62 million breeding ducks and a fall flight of 100 million birds.

By 1985, waterfowl populations had plummeted to record lows. Habitat that waterfowl depend on was disappearing at a rate of 60 acres per hour. Recognizing the importance of waterfowl and wetlands to North Americans and the need for international cooperation to help in the recovery of a shared resource, the United States and Canada governments developed a strategy to restore waterfowl populations through habitat protection, restoration, and enhancement. Mexico became a signatory to the plan in 1994.



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*The chestnut-collared longspur breeds in BCR 11.*

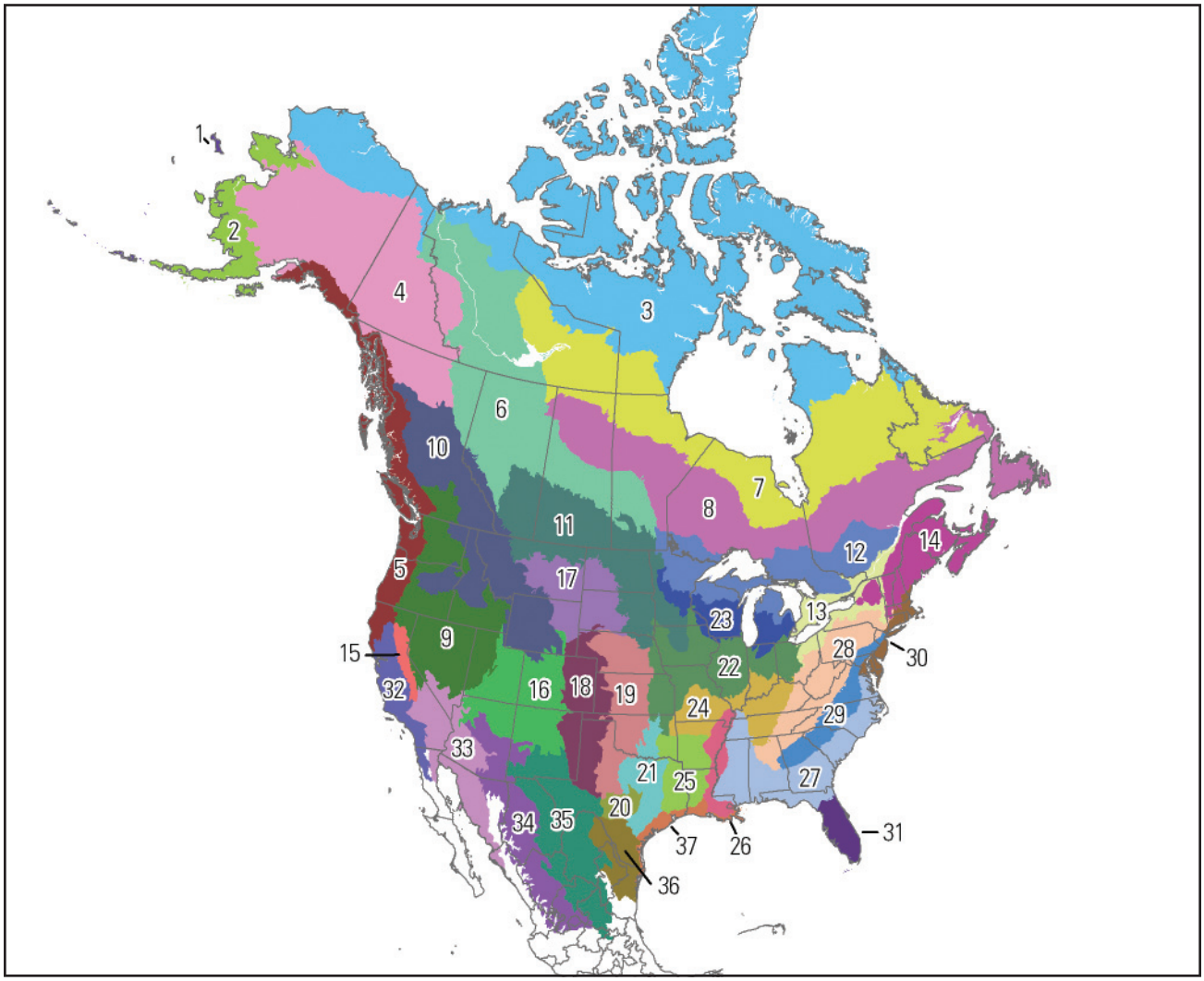


**Figure 2. Map of the bird conservation regions of North America.**

The plan is innovative because of its international scope, plus its implementation at the regional level. Its success depends on the strength of partnerships called "joint ventures," which involve federal, state, provincial, tribal, and local governments; businesses; conservation organizations; and individual citizens.

Joint ventures are regional, self-directed partnerships that carry out science-based conservation through community participation. Joint ventures develop implementation plans that focus on areas of concern identified in the plan.

The North Dakota districts lie within the Prairie Pothole Joint Venture (PPJV), which covers the Prairie Pothole Region of Montana, North Dakota, South Dakota, Minnesota, and Iowa. Established in 1987, the PPJV is one of the original six priority joint ventures under the North American Waterfowl Management Plan. The joint venture protects, restores, and enhances high-priority wetland and grassland habitat to help sustain populations of waterfowl, shorebirds, waterbirds, and prairie land birds. The PPJV includes one-third (100,000 square miles) of North America's Prairie Pothole Region. The remaining 200,000 acres is located in the Canadian provinces of Manitoba, Saskatchewan, and Alberta. This unique area contains millions of depressional wetlands ("potholes") that constitute one of the richest wetland systems in the world. These glacially formed prairie potholes and their surrounding grasslands are highly productive and support an incredible diversity of bird life.

## PPJV Implementation Plan

The Prairie Pothole Region remains the most important waterfowl-producing region on the continent, generating more than half of North America's ducks. Nearly 15% of the continental waterfowl population comes from the PPJV region (Montana, North Dakota, South Dakota, Minnesota, and Iowa). As many as 10 million ducks and 2 million geese use the PPJV region during migration or for nesting. The wetlands and associated grassland habitat in the PPJV region provide breeding habitat to more than 200 species of migratory birds. Bald eagles, peregrine falcons, whooping cranes, piping plovers, and interior least terns frequent the PPJV region during migration and breeding periods.

The PPJV implementation plan was prepared in 2005 and outlines the mission, goals, objectives, and strategies for joint venture activities. Individual state action groups and steering committees prepared state action plans that "stepped down" joint venture activities to the state and local level.

The goal of the PPJV is to increase waterfowl populations through habitat conservation projects that improve natural diversity across the prairie pothole landscape of the United States. The joint venture attempts to carry out landscape-level habitat projects so that waterfowl populations increase during the wet years and stabilize under moderate conditions. Since little can be done to stabilize the breeding populations across the Prairie Pothole Region during extended drought, joint venture strategies are designed to carry out actions that take advantage of years when precipitation is at least normal.

## Recovery Plans for Federally Listed Threatened or Endangered Species

Where federally listed threatened or endangered species occur at the nine districts, the Service will follow the management goals and strategies in the species recovery plans. The list of threatened or endangered species that occur at the districts will change as species are listed or delisted, or as listed species are discovered on district lands.

The districts are following the recovery plans for these species:

- Piping plovers (threatened) in the northern Great Plains (USFWS 1994a).
- Whooping crane (endangered) (USFWS 1994b).
- Interior least tern (endangered) (USFWS 1990).
- Western prairie fringed orchid (threatened) (USFWS 1996).

USFWS

*The piping plover is a threatened species that uses district shorelines for feeding and nesting.*

## State Comprehensive Conservation Wildlife Strategy

Over the past several decades, documented declines of wildlife populations have occurred nationwide. Congress created the State Wildlife Grant (SWG) program in 2001. This program provides states and territories with federal dollars to support conservation aimed at preventing wildlife from becoming endangered and in need of protection under the Endangered Species Act. The SWG program represents an ambitious endeavor to take an active hand in keeping species from becoming threatened or endangered in the future.

According to the SWG program, each state, territory, and the District of Columbia must complete a comprehensive wildlife conservation strategy (CWCS) by October 1, 2005 to receive future funding.

These strategies will help define an integrated approach to the stewardship of all wildlife species, with additional emphasis on species of concern and habitats at risk. The goal is to shift focus from single-species management and highly specialized individual efforts to a geographically based, landscape-oriented, fish and wildlife conservation effort. The Service approves these plans and administers SWG program funding.

North Dakota's CWCS is a strategic vision with the goal of preserving the state's wildlife diversity. It is intended to identify species of greatest conservation need, provide fundamental background information, strategic guidance, and a framework for developing and coordinating conservation actions to safeguard all fish and wildlife resources.

The state of North Dakota has taken a landscape approach to conservation planning, which has numerous advantages. It allows the state to link species requiring conservation to a key landscape and habitat, often within a specific geographic area. This approach also provides a comprehensive listing of all other fish and wildlife using the landscape, while providing relative plant and soil conditions applicable to the landscape. A landscape approach helps to identify corresponding conservation actions needed across the landscape, along with the potential partners who are or could be addressing them. Three tools are used to identify landscape components: land cover information, ecoregions, and statistical models. Ecoregions were defined based on general similarity of geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology. The CWCS recognizes four ecoregions commonly referred to as the Red River Valley, Drift Prairie, Missouri Coteau, and Missouri Slope.

The CWCS identified conservation problems encountered in North Dakota that apply to all four of the ecoregions. Direct loss of habitat is a key issue because very little, native, tall-grass prairie remains in the state. The conservation action will be to protect native tall-grass prairie where possible.

Habitat fragmentation is occurring throughout the state due to construction of roads, shelterbelts, and agricultural practices. Actions will include the removal of dilapidated shelterbelts or stands of trees within grasslands. Habitat degradation occurring from improper grazing practices and loss of the historical fire regime can be fixed by using grazing systems to benefit tall-grass species and promoting the use of fire. Other actions include extending the time between haying and grazing, promoting mid-term required management, and providing incentives to defer or idle cutting of tame grass (cultivated, nonnative grass such as smooth brome). Invasive plants, including noxious weeds such as leafy spurge, will be controlled through biological and chemical methods.

The CWCS for the state of North Dakota was reviewed and information was used during development of the draft CCP. Carrying out CCP habitat goals and objectives will support the goals and objectives of the CWCS.

## 1.5 Ecosystem Description and Threats

The Service has adopted watersheds as the basic building blocks for carrying out ecosystem conservation. The districts span two Service-designated ecosystems —the Missouri River main stem ecosystem and the Hudson Bay ecosystem—with the majority falling within the former (see figure 3, ecosystem map).

Major threats identified for these ecosystems include native prairie conversion to cropland, expansion of invasive plant species, and wetland drainage and degradation. The districts play a major role in (1) continued leadership and support of regional initiatives such as the PPJV, and (2) continued support of conservation partners including the NDGF and private organizations such as Ducks Unlimited. In addition, the Service is continually working with private landowners through the Partners for Fish and Wildlife Program to restore and improve grassland and wetland habitats on private lands.

## 1.6 Planning Process

This draft CCP and EA for the districts is intended to comply with the Improvement Act, the NEPA, and the implementation regulations of the acts. The Service issued its Refuge System planning policy in 2000. This policy established requirements and guidance for refuge and district plans—including CCPs and step-down management plans—to ensure that planning efforts comply with the Improvement Act. The planning policy identified several steps of the CCP and environmental analysis process (see figure 4, steps in the planning process).

Figure 4 displays the planning process to date for this draft CCP and EA. The Service began the preplanning process in August 2006. The planning team is Service personnel from the affected North Dakota districts, the regional divisions of refuge planning and visitor services, and the NDGF (see appendix B, preparers and contributors). During preplanning, the team developed a mailing list, internal issues, and a special qualities list. The planning team identified current district program status, compiled and analyzed relevant data, and determined the purposes of the districts. Table 1 summarizes accomplishment of the main planning steps for this CCP effort.

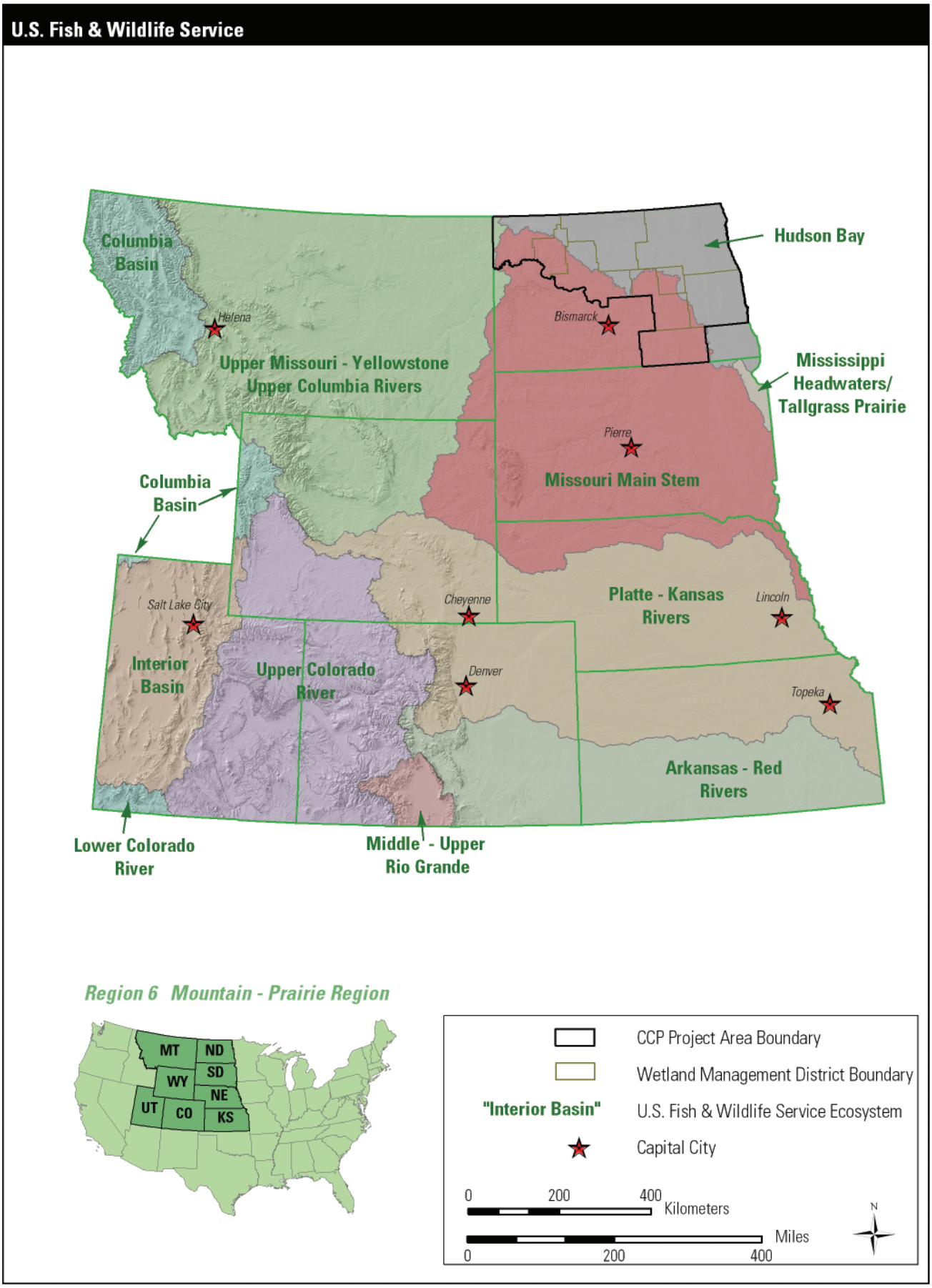


**Figure 3. Ecosystem map for region 6 of the U.S. Fish and Wildlife Service.**

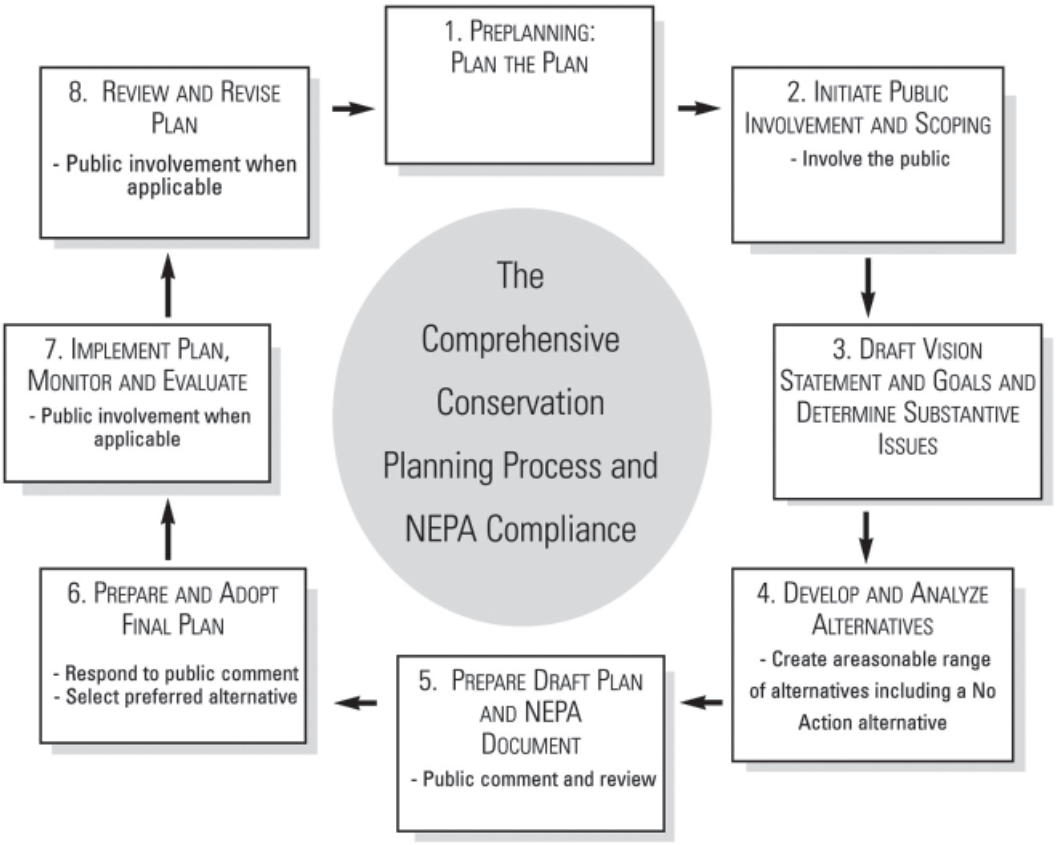


**Figure 4. Steps in the planning process.**

Scoping is the process of obtaining information from the public for input into the planning process.

Over the course of preplanning and scoping, the planning team collected available information about the resources of the districts and surrounding areas. "Chapter 4, Affected Environment" summarizes this information.

The draft CCP (chapter 6) outlines long-term guidance for management decisions; sets forth proposed objectives and strategies to accomplish district purposes and meet goals; and identifies the Service's best estimate of future needs. The draft CCP details program levels that are sometimes substantially above current budget allocations and, as such, are primarily for Service strategic planning purposes.

A notice of intent to prepare the draft CCP and EA was published in the *Federal Register* on February 28, 2007. Public scoping began in April 2007 with a planning update and comment form mailed to interested parties in March 2007.

## Coordination with the Public

A mailing list of more than 1,025 names includes private citizens; local, regional, and state government representatives and legislators; other federal agencies; and interested organizations (see appendix C, public involvement).

In April 2007, the first planning update issue was sent to everyone on the mailing list. The planning update provided information about the history of the districts and the CCP process, along with an invitation to public scoping meetings. The planning update included a comment form and postage-paid envelope to give the public an opportunity to easily provide written comments. The local media also announced the public meetings.

The Service held six public scoping meetings during March–April 2007 (see table 1 for details). After a presentation about the districts, along with an overview of the CCP and NEPA processes, attendees were encouraged to ask questions and offer comments. Service employees were available after the presentation to answer individual questions about the CCP process and the district management overview. Each attendee was given a comment form to submit additional thoughts or questions in writing.

The Service received 46 written comments throughout the scoping process. Input obtained from meetings and correspondences, including emails, were considered in development of this draft CCP and EA.

**Table 1. Planning Process Summary for the Nine Districts, North Dakota.**

| *Date* | *Event* | *Outcome* |
|---|---|---|
| May 2006 | Initial meeting with North Dakota project leaders. | CCP overview. |
| August 2006 | Meeting with district staffs and field review. | Planning team was finalized; biological and visitor services issues were reviewed. |
| December 2006 | Kick off meeting, initial development of vision and goals. | District purposes were identified; initial issues and qualities list was developed; mailing list was started; biological and mapping needs were identified; and public scoping was planned. |
| February 2007 | Public notice of intent to prepare a CCP. | Notice was published in the *Federal Register*. |
| March 2007 | Initial public contact through mailing of the first planning update. | Public opportunity was offered (to learn about the CCP and provide comments); planning update described the CCP process and provided comment forms and postage-paid envelopes mailed. |
| March–April 2007 | Public meetings. | Public opportunity was offered (to learn about the CCP and provide comments). |
| March–April 2007 | Alternatives development. | Alternatives for district management were developed and drafted by the planning team. |
| February–August 2007 | Development of biological objectives. | Objectives and strategies were developed and drafted by the planning team for the biological aspects of district management. |
| June–July 2007 | Development of visitor services objectives. | Objectives and strategies were developed and drafted by the planning team for the visitor services at the districts. |
| April 2008 | Internal review of the draft plan. | Draft plan was reviewed by the Service's regional staff. |
| August 2008 | Draft plan released for public review. | Revised draft plan was published for review by the public. |

## State Coordination

In September 12, 2006, an invitation letter to participate in the CCP process was sent by the Service's region 6 director to the director of the

NDGF. Two representatives from the NDGF are part of the CCP planning team. Local NDGF wildlife managers and the district staffs maintain excellent and ongoing working relations that precede the start of the CCP process.

The NDGF's mission is to "protect, conserve, and enhance fish and wildlife populations and their habitats for sustained public consumptive and nonconsumptive uses." The NDGF is responsible for managing natural resource lands owned by the state, in addition to enforcement responsibilities for the state's migratory birds and endangered species. The state manages more than 78,000 acres in support of wildlife, recreation, and fisheries.

## Tribal Coordination

On October 19, 2006, the Service's region 6 director sent a letter to six Native American tribal governments in North Dakota, South Dakota, and Minnesota: Sisseton-Wahpeton Oyate, Spirit Lake Tribal Council,

Standing Rock Sioux, Three Affiliated Tribes, White Earth Band of Chippewa, and Turtle Mountain Band of Chippewa. With information about the upcoming CCP, the letter invited tribal recipients to serve on the planning team. None of the tribes expressed interest in participating in the process.

## Results of Scoping

Table 1 (previous) summarizes all scoping activities. Comments collected from scoping meetings and correspondences, including comment forms, were used in the development of a final list of issues addressed in this draft CCP and EA.

The Service determined which alternatives could best address these issues. The planning process ensures that issues with the greatest effect on the districts are resolved or given priority over the life of the final CCP. "Chapter 2, The Districts" summarizes the identified issues, along with a discussion of effects on resources.

In addition, the Service considered changes to the current districts' management that were suggested by the public and other groups.

# 2 The Districts


USFWS

*Waterfowl production areas are paid for with Duck Stamp dollars to protect habitat for waterfowl.*

A wetland management district provides oversight for all of the U.S. Fish and Wildlife Service's small land tracts in a multicounty area. The nine districts manage 1,208 waterfowl production areas (232,509 acres), ten of thousands of conservation easements, and 50 wildlife development areas (18,540 acres) in 34 counties in North Dakota. These district lands (totaling 1,125,084 acres) are part of the National Wildlife Refuge System, a network of lands set aside to conserve fish and wildlife and their habitat.

- The Service bought these WPAs with funds generated from the sale of federal Duck Stamps to protect and restore waterfowl habitat.
- The Bureau of Reclamation (Reclamation) bought the wildlife development areas (WDAs) as part of North Dakota's Garrison Diversion Unit. Developed for wildlife by restoring drained wetlands and planting cropland acres to grass, the Service manages these areas primarily for the production of migratory birds.
- The conservation easements are on private lands where landowners have sold some of their property rights to the Service for protection and restoration of wildlife habitat.

This chapter describes the history, special values, purposes, vision, goals, and planning issues for the nine North Dakota wetland management districts.

## 2.1 Establishment, Acquisition, and Management History

The nine districts were established in the early 1960s, with the major objectives of wetland preservation, waterfowl and wildlife production, and maintenance of breeding grounds for migratory birds. The districts also provide a northern staging area and habitat for migration.

### Habitat Protection

The Service manages the WPAs for the benefit of waterfowl, other migratory birds, threatened and endangered species, and resident wildlife.

The districts protect habitat primarily with two tools—WPAs and conservation easements, which are described below. On May 5, 1960, the Service bought the first WPA (212 acres in LaMoure County) within the nine-district geographic area.

- WPAs are public lands bought by the federal government for increasing the production of migratory birds, especially waterfowl. The purchase of land is also known as "ownership in fee title," where the federal government holds ownership of land on behalf of the American public. Money to buy WPA lands generally comes from the public purchase of a federal Duck Stamp. This important program is to ensure the long-term protection of waterfowl and other migratory-bird-breeding habitat that is located primarily in the Prairie Pothole Region of the northern Great Plains. All WPAs are within districts managed by Service staff. WPAs are open to the public for hunting, fishing, bird watching, trapping, hiking and most other nonmotorized and noncommercial outdoor recreation. (Recreational trapping is an activity that has been authorized by 50 CFR, part 31.16.)
- Conservation easements are acquired to protect migratory bird species habitat on private land. Typically used where fee acquisition is not desirable or needed, perpetual easements are bought from willing landowners within a wetland management district. Conservation easements have several advantages over the outright purchase of lands by the Service. First, they are more cost-effective, both in terms of initial purchase, and in long-term management responsibilities. While conservation easement contracts do require attentive enforcement to ensure their integrity, they do not carry the other burdens of ownership; for example, maintenance of facilities such as fences and signs, control of invasive plants, and mowing of ditches. Second, the operator owns and manages the land in much the same way as it was before the conservation easement purchase. This is because the program was developed and carried out by managers, biologists, and realty specialists with an interest in protecting resources at the landscape scale while minimally affecting, and even complementing, other agricultural practices. Therefore, a single-habitat conservation easement is often referred to as either a "wetland easement" or a "grassland easement." Conservation easements generally prohibit the cultivation of grassland habitat, while still permitting the landowner traditional grazing uses. A wetland easement generally prohibits grazing, burning, and leveling.

The federal Migratory Bird Conservation Fund finances the habitat protection programs—WPAs and conservation easements. The Migratory Bird Conservation Fund provides the U.S. Department of Interior (DOI) with monies to acquire migratory bird habitat. The 1958 amendment to the Duck Stamp Act authorized the Small Wetlands Acquisition Program and provided for the acquisition of WPAs in addition to the previously authorized habitats. Receipts from the sale of the Duck Stamp are used to acquire habitat under the provisions of the Migratory Bird Treaty Act (16 USC 715). The purpose of this important program is to ensure the long-term protection of waterfowl and other migratory bird breeding habitat that is located primarily in the Prairie Pothole Region of the northern Great Plains (see figure 5, map of the Prairie Pothole Region). The Service's perpetual conservation easements are key components of the Small Wetlands Acquisition Program; these easements, together with WPAs, have contributed greatly to the conservation and maintenance of prairie-nesting migratory birds.

The legislation authorizing the use of Duck Stamp money for wetland easement acquisitions through the Small Wetlands Acquisition Program required state approval. In North Dakota, approvals have been granted over time on a county-by-county basis. Soon after the passage of the 1958 amendment to the Duck Stamp Act, a team of Service biologists evaluated wetland habitats in North Dakota and made recommendations on the number of acres that should be protected in each county north and east of the Missouri River and two counties to the south and west. The original plan was for the state of North Dakota to protect half of these acres and for the Service to protect the other half with easements. The Service, therefore, proposed an acreage figure for each county based on this assumption. The state approved these figures, which became the respective "caps" for number of wetland acres that could be covered by Service easements in each county, even though they represented only half of what the Service recommended should actually be protected. In some counties, these caps have been met and no additional wetland easements can be bought with Duck Stamp funds without further approval from the governor; however, easements can be bought with non-Duck Stamp funds. To keep track of the number of acres bought in each county, the Service created and maintained easement summaries, which identify the number of wetland acres for which landowners were paid.

WDAs are another means through which the districts conserve habitat. Reclamation bought valuable wetland habitat and transferred these lands to the Service for management to offset habitat losses resulting from the development of the Garrison Diversion Project in western North Dakota. Through a memorandum of agreement between the Service, Reclamation, and NDGF, the Service manages these lands as part of the Refuge System within wetland management districts for migratory birds, particularly waterfowl. There are 37 WDAs (19,829 acres) scattered across North Dakota. The management of and regulations for public use at WDAs are similar to that for WPAs.

There are other conservation easements administered by the districts, but these were not acquired through the Small Wetlands Acquisition Program. The most common of these are Farmers Home Administration conservation easements—"FmHA easements" (also known as RECD [Rural Economic and Community


**Figure 5. Map of the Prairie Pothole Region of the United States and Canada.**

Development] easements, Farm Service Agency "Ag-Credit easements," and U.S. Department of Agriculture [USDA] conservation easements, depending on the status of the USDA program responsible for these properties at the time they were in federal inventory). The 1985 Farm Bill Consolidated Farm and Rural Development Act was the initial authorization for FmHA easements. The Farmers Home Administration was given authority to establish easements for conservation, recreation, and wildlife purposes on properties that were foreclosed on by the federal government ("inventory" properties), and the Service was designated easement manager for those easements worthy of inclusion into the Refuge System.

The Farmers Home Administration's inventory lands were inspected for wetlands and identified similarly as if the Service were to accept wetlands for its Small Wetlands Acquisition Program. However, protection of wetlands, floodplains, and their watersheds, along with historical and cultural resources (that is, "Native Tree Claims") required a variety of provisions and restrictions in these conservation easements. The quitclaim deed that was prepared when the inventory lands were sold outlined these provisions—rights reserved by the Service are listed in the "Covenants by the Landowner" and vary from easement to easement.

## District Descriptions

The nine wetland management districts are home for all waterfowl species found in the Prairie Pothole Region (see figure 1, vicinity map, in chapter 1). The nine districts manage approximately 1,146,322 acres. Below is a brief description for each of the nine districts.

### *Arrowwood Wetland Management District*

- Foster and Eddy counties
- Headquarters—Pingree, North Dakota
- Part of the Arrowwood Wetland Management District Complex
- All district lands—26,932 acres
  - 28 WPAs: 6,144 acres
  - wetland easements: 19,055 acres
  - grassland easements: 0 acres
  - FmHA easements: 1,733 acres
  - WDAs: 0 acres

The district, in east-central North Dakota, was established in 1961 as a breeding ground for migratory birds and other wildlife. Wildlife species often observed at the WPAs include waterfowl, upland game birds, songbirds, birds of prey, deer, and numerous furbearers. The WPAs offer many opportunities for wildlife observation, hiking, hunting, photography, winter sports (cross-country skiing), and education and interpretation for organized groups.

### *Audubon Wetland Management District*

- McLean, Ward, and Sheridan counties
- Headquarters—Coleharbor, North Dakota
- Part of the Audubon Wetland Management District Complex
- All district lands—188,751 acres
  - 101 WPAs: 18,584 acres
  - wetland easements: 95,061 acres
  - grassland easements: 55,022 acres
  - FmHA easements: 7,400 acres
  - 20 WDAs: 12,684 acres

The district includes WPAs and WDAs. Reclamation developed these WDAs for wildlife by restoring drained wetlands and planting cropland acres to grass. The WDAs were transferred to the Service to be managed primarily for the production of migratory birds and for public use.

All public lands managed as the Audubon Wetland Management District contain wetland and grassland habitat for waterfowl, other migratory birds, and many other species of wildlife. Rotational grazing, haying, and prescribed burning are common techniques used to improve and maintain grasslands for nesting birds. These public lands help sustain North America's waterfowl populations by providing secure wetland and grassland habitats.

### *Chase Lake Wetland Management District*

- Stutsman and Wells counties
- Headquarters—Woodworth, North Dakota
- Part of the Arrowwood National Wildlife Refuge Complex
- All district lands—111,680 acres
  - 129 WPAs: 35,473 acres
  - wetland easements: 56,057 acres
  - grassland easements: 14,812 acres

USFWS

*American white pelicans rest at Chase Lake Wetland Management District.*

- FmHA easements: 1,608 acres
- 5 WDAs: 3,730 acres

Located in the Prairie Pothole Region of the United States, the district and surrounding area provide breeding and resting habitat for more than 293 bird species. The district is comprised of native prairie, dense nesting cover, and an amazing density of wetlands. The majority of this land has not been altered since Euro-American settlement times.

The WPAs, purchased since 1960, have been used by researchers to provide important information about waterfowl and wetland densities. The diversity and abundance of wildife species at these WPAs provide excellent opportunities for outdoor recreation such as hunting, trapping, and wildlife observation.

## *Crosby Wetland Management District*

- Burke, Divide, and Williams counties
- Headquarters—Crosby, North Dakota

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*Baird's sparrow.*

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*Birding groups nationwide know North Dakota as the best area for opportunities to view the unique Baird's sparrow and Sprague's pipit (above).*

- Part of the Lostwood Wetland Management District Complex
- All district lands—114,552 acres
  - 99 WPAs: 18,730 acres
  - wetland easements: 70,019 acres
  - grassland easements: 25,083 acres
  - FmHA easements: 720 acres
  - WDAs: 0 acres

Wetlands and grasslands have been preserved on private property by the purchase of easements from landowners who have agreed not to drain, fill, or burn their wetlands, or to till their grasslands. Several hundred easement contracts protect wetlands and native grasslands.

The district, located in northwestern North Dakota, shares a border with Canada and the state of Montana. This area is known as one of the finest nesting and breeding sites for hundreds of species of birds.

## *Devils Lake Wetland Management District*

- Benson, Cavalier, Grand Forks, Nelson, Pembina, Ramsey, Towner, and Walsh counties
- Headquarters—Devils Lake, North Dakota
- Part of the Devils Lake Wetland Management District Complex
- All district lands—210,717 acres
  - 257 WPAs: 48,885 acres
  - wetland easements: 150,182 acres
  - grassland easements: 4,264 acres
  - FmHA easements: 4,606 acres
  - 11 WDAs: 2,780 acres

The district primarily provides wetland areas needed by waterfowl in the spring and summer for nesting and feeding. Primary objectives of the Devils Lake Wetland Management District are wetland habitat preservation and improvement, waterfowl and wildlife production, maintenance of migration habitat, and provision of winter cover for resident wildlife.

Devils Lake Wetland Management District is home for all waterfowl species found in the Prairie Pothole Region. Mallard, gadwall, and blue-winged teal are the most abundant ducks. Giant Canada geese have been reintroduced and efforts are underway to expand the range of this historically important species. Spectacular concentrations of migratory birds gather in the district each spring and fall including snow geese, whose vast numbers are a magnificent sight. The WPAs also provide habitat for white-tailed deer, pheasant, turkey, sharp-tailed grouse, Hungarian partridge, and occasional moose.

The WPAs provide many opportunities for year-round outdoor enjoyment including hunting, trapping, wildlife observation, photography, and environmental study.

### *J. Clark Salyer Wetland Management District*

- Bottineau, Kenville, McHenry, Pierce, and Rolette counties
- Headquarters—Upham, North Dakota
- Part of the J. Clark Salyer Wetland Management District Complex
- All district lands—197,691 acres
  - 127 WPAs: 27,332 acres
  - wetland easements: 135,321 acres
  - grassland easements: 28,065 acres
  - FmHA easements: 6,973 acres
  - WDAs: 0 acres

The district's lands are important feeding and resting areas for hundreds of thousands of waterfowl that annually migrate through the Central Flyway. The district has developed into one of the most important duck production areas in the United States.

The district has become a favorite spot for birds of all descriptions to stop on their migrations north and south. Gadwall, blue-winged teal, mallard, and Canada goose are the most numerous nesting waterfowl. Many species of shorebirds and grebes, American white pelican, sandhill crane, lark bunting, longspurs, and sparrows—including Baird's and Le Conte's—are among the birds that take summer residence at the district. Managing upland areas for waterfowl nesting habitat has also benefited upland game birds. The sharp-tailed grouse, ring-necked pheasant, gray partridge, ruffed grouse, and wild turkey are all occupants of the district.

### *Kulm Wetland Management District*

- Dickey, LaMoure, Logan, and McIntosh counties
- Headquarters—Kulm, North Dakota
- Part of the Kulm Wetland Management District Complex
- All district lands—200,712 acres
  - 231 WPAs: 44,739 acres
  - wetland easements: 112,692 acres
  - grassland easements: 38,251 acres
  - FmHA easements: 4,390 acres
  - 1 WDA: 640 acres

In the heart of the Prairie Pothole Region of the United States, the district is in southeastern North Dakota. Glacial action molded the landscape of the area, leaving a wealth of wetlands. Vegetation that developed on the glacially scoured area and glacial end moraine hills represents a transition between tall-grass and short-grass prairie. Bison, waterfowl, and early native people thrived.

The James River, running through the eastern part of the district, forms a major migration corridor for numerous species of migratory birds. Although highly altered following the influx of European immigrants, the area retains many of its wetlands and numerous acres of native grass. A wide variety of migratory birds uses the district for breeding grounds, nest sites, and migration rest stops. Preservation and management of the migratory bird resource is the primary duty of the district.

### *Lostwood Wetland Management District*

- Mountrail County
- Headquarters—Kenmare, North Dakota
- Part of the Lostwood Wetland Management District Complex
- All district lands—84,145 acres
  - 56 WPAs: 12,506 acres
  - wetland easements: 35,000 acres
  - grassland easements: 36,034 acres
  - FmHA easements: 605 acres
  - WDAs: 0 acres

The district is located in northwestern North Dakota and extends from eastern Burke County, north to the Canadian border, west to the Montana line, and south to Lake Sakakawea. A variety of wildland habitats are present ranging from (1) prairie creeks and rivers to rolling hills covered with native prairie grasses and dotted with numerous wetlands, and (2) flat croplands to gradual slopes leading downward toward Lake Sakakawea and the rough breaks and bluffs that border this impoundment in the Missouri River system. The WPAs in the district provide more than 2,700 acres of prairie grasses, wildflowers, and wetlands habitat as a great opportunities for hunting, trapping, and wildlife observation within the coteau (hilly upland) prairie.

### *Valley City Wetland Management District*

- Barnes, Cass, Griggs, Steele, and Traill counties
- Headquarters—Valley City, North Dakota
- Part of the Arrowwood Wetland Management District Complex
- All district lands: 61,218 acres
  - 82 WPAs: 17,653 acres
  - wetland easements: 41,583 acres
  - grassland easements: 0 acres
  - FmHA easements: 1,982 acres
  - WDAs: 0 acres

The district is located in east-central North Dakota. The eastern one-third of the district is located in the Red River Valley. This area, characterized by flat, intensively farmed lands, was once the lake bed of Glacial Lake Agassiz. The remaining two-thirds of the district is part of the glaciated Prairie Pothole Region known as the Drift Prairie. The area is characterized by a gentle and smooth rolling topography with numerous wetlands, ranging from under an acre to several hundred acres. The district staff promotes conservation farming and ranching practices, protects unique prairie ecosystems, increases waterfowl and other prairie wildlife species, and provides consumptive and nonconsumptive public use.

### District Information Summary

Mallard, gadwall, and blue-winged teal are the most abundant ducks, with several other species of diving and dabbling ducks common to the districts. Giant Canada geese have been reintroduced and efforts are underway to expand the range of this historically important species. Spectacular concentrations of waterfowl and other migratory birds gather in the districts each spring and fall, including snow geese, whose vast numbers are a magnificent sight.

In addition, WPAs provide habitat for many resident species of wildlife including white-tailed deer, pheasants, turkeys, and sharp-tailed grouse. Creating habitat diversity and managing wildlife cover in WPAs result in an increase in wildlife abundance, an important objective of the U.S. Fish and Wildlife Service.

The districts use many management practices to benefit waterfowl. These techniques include construction of nesting structures, creation and restoration of wetlands, management of water levels in wetlands, establishment of winter food plots, management of nesting cover, prescribed burning, haying and grazing (see appendix D, draft compatibility determinations), and law enforcement. These techniques enhance and create a diversity of habitats that are used by many wildlife species.

## 2.2 Special Values

Early in the planning process, the planning team and public identified the outstanding qualities of the nine wetland management districts. District qualities are the characteristics and features of each district that make it special, valuable for wildlife, and worthy of Refuge System status. It was important to identify the special values of each district to recognize its worth and to ensure that the special values of the districts are preserved, protected, and enhanced through the planning process. District qualities can be unique biological values, as well as something as simple as "a quiet place to see a variety of birds and enjoy nature."

The following summarizes the qualities that make the districts unique and valued:

- The districts have a very high density of wetlands for waterfowl and migratory birds.

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*District staffs work with private landowners to protect wetland habitat under easement.*

USFWS

*District habitats are essential to breeding waterfowl populations.*

- Very large blocks of intact native prairie ecosystem are protected through the districts' conservation easements and fee ownership.
- The districts provide protected and managed wetlands and uplands for breeding and staging habitat for waterfowl and shorebirds during migration within the Central Flyway.
- Visitors can find diverse and abundant possibilities for public use at the districts.
- The districts provide for quality environmental education.
- The districts provide for the protection of breeding areas for endangered species such as the piping plover.
- The districts protect and manage unique landscapes such as the deciduous forest of the Turtle Mountains.

## 2.3 Purposes

The districts were designated as part of the Small Wetlands Acquisition Program in the 1950s to save wetlands from various threats, particularly drainage. The passage of Public Law 85-585 in August 1958 amended the Migratory Bird Hunting and Conservation Stamp Act of 1934 ("Duck Stamp Act") and allowed for the acquisition of waterfowl production areas and conservation easements for waterfowl production.

The main authorities in establishment of the districts follow:

- Migratory Bird Hunting Stamp Act 16 USC 718(c)—"As waterfowl production areas subject to all provisions of the Migratory Bird Conservation Act … except the inviolate sanctuary provisions."
- Migratory Bird Conservation Act 16 USC 715d—"For any other management purposes, for migratory birds."

The districts are "to assure the long-term viability of the breeding waterfowl population and production through the acquisition and management of waterfowl production areas, while considering the needs of other migratory birds, threatened and endangered species, and other wildlife" (memorandum from Region 6 Assistant Regional Director Richard A. Coleman, December 2006). This purpose statement was developed for all region 6 wetland management districts. The districts provide a northern staging area and habitat for migration.

For this CCP, the Service has combined the nine districts for evaluation as a group and program. The purposes and management capabilities and challenges are similar for the nine districts.

All nine districts were established under two authorities—the Migratory Bird Hunting Stamp Act of March 16, 1934, and the Migratory Bird Conservation Act of February 18, 1929:

- The Migratory Bird Hunting Stamp Act ("Duck Stamp Act") provides for the conservation, protection, and propagation of native species of fish and wildlife, including migratory birds that are threatened with extinction.
- The Migratory Bird Conservation Act works toward meeting the obligations of the United States under the migratory bird treaty with Great Britain by the following:

- Lessening the dangers threatening migratory game birds from drainage and other causes.
- The acquisition of areas of land and water to furnish in perpetuity reservations for the adequate protection of such birds.
- Authorizing appropriations for the establishment of such areas, their maintenance and improvement, and for other purposes.

## 2.4 Vision

At the beginning of the planning process, the Service developed a vision for the districts. The vision describes the focus of district management, including what would be different in the future, and is the essence of what the Service is trying to accomplish by the end of the 15-year CCP period. The vision for the districts follows.

*Wetland management districts conserve an important network of public and private wetland and upland habitat in North Dakota. This network preserves the integrity of the historical and vital resting and breeding grounds of North America's migratory waterfowl.*

*As part of the National Wildlife Refuge System, these lands benefit ducks, other migratory birds, threatened and endangered species, and resident wildlife.*

*The responsible management and protection of this expanding network requires adequate funding, dedicated personnel, and successful partnerships.*

*District communities and visitors value grasslands and marshes as a beneficial and important component of a diverse, healthy, and productive prairie landscape.*

*Current and future generations enjoy wildlife-dependent uses of these lands and partners, especially waterfowl hunters, actively support and encourage the districts' habitat conservation programs.*

## 2.5 Goals

The Service developed six goals for the districts based on the Improvement Act and information developed during planning. The goals direct work toward achieving the vision and purposes of the districts and outline approaches for managing district resources.

### Habitat and Wildlife Goal

Protect, restore, and enhance the ecological diversity of grasslands and wetlands of the North Dakota Prairie Pothole Region. Contribute to the production and growth of continental waterfowl populations to meet the goals of the North American Waterfowl Management Plan. Also, support healthy populations of other migratory birds, threatened and endangered species, and other wildlife.

### Monitoring and Research Goal

Use science, monitoring, and applied research to advance the understanding of the Prairie Pothole Region and management within the North Dakota wetland management districts.

### Cultural Resources Goal

Identify and evaluate cultural resources in the North Dakota wetland management districts that are on Service-owned lands or are affected by Service undertakings. Protect resources determined to be significant and, when appropriate, interpret resources to connect staff, visitors, and communities to the area's past.

### Visitor Services Goal

Provide visitors with quality opportunities to enjoy hunting, fishing, trapping, and other compatible wildlife-dependent recreation on Service-owned lands and expand their knowledge and appreciation of the prairie landscape and the National Wildlife Refuge System.

### Partnerships Goal

A diverse network of partners joins with the North Dakota wetland management districts to support research; protect, restore, and enhance habitat; and foster awareness and appreciation of the prairie landscape.

### Operations Goal

Effectively employ staff, partnerships, and volunteers and secure adequate funding in support of the National Wildlife Refuge System's mission.

## 2.6 Planning Issues

Several key issues were identified following the analysis of comments collected from Service staff and the public and a review of the requirements of the Improvement Act and the NEPA. Substantive comments (those that could be addressed within the authority and management capabilities of the Service) were considered during the formulation of the alternatives for future management. Summaries of these key issues are below.

## Wetland and Upland Habitats

All of the districts have a primary purpose to provide optimal habitat conditions for the needs of a suite of waterfowl and other migratory birds and, to a lesser extent, native resident wildlife. Aggressive management of wetland and upland habitats must be conducted to achieve goals and objectives. Wetland and upland habitats need to be protected and enhanced through management. Habitat protection needs to be evaluated through a priority system so that different means of protection, through either fee title or conservation easement, can be evaluated.

## Invasive Plants

The districts include uplands, which were previously farmed. Farmed uplands have since been restored to mixes of tame and native grasses and are interspersed with native uplands, the bulk of which have the native vegetation character but are compromised by invading species. The primary invasive plants are leafy spurge, Canada thistle, and absinth wormwood. Kentucky bluegrass and smooth brome are primary invasive grass species. These nonnative grasses and forbs, and potentially invasive native woody species, substantially diminish the quality and suitability of upland habitat for many native wildlife species. Western snowberry and silverberry are native shrubs that have greatly expanded their coverage in some areas where natural regimes of fire and grazing have been altered.

## Energy Development

While the Service works to minimize the negative effects of energy development, the demand for energy is an increasing factor in habitat quality and preservation at the districts. The production of biofuels, coal, oil, gas, and wind energy has the potential to impact effectiveness of many district programs. The Service supports research that helps to understand the effects on wildlife of such energy projects as wind towers and conversion of grassland to cropland to support production of ethanol. It is a high priority for the Service to work in partnership with conservation and agricultural groups to support conservation programs such as the following: federal Farm Bill legislation, NDGF projects, water quality and watershed projects, and private conservation efforts.

The physical structure of wind power turbines has unknown effects on birds. Through studies and analysis, the Service is currently evaluating wind towers to determine their effect on wildlife. In addition, it is unknown if wind power would affect the potential for future habitat protection through conservation easements.

The Service needs to evaluate oil and gas development. Effects on some district lands—including salt-water contamination, filling of wetlands, and road development—have increased as increasing exploration takes place in North Dakota.

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*Canada thistle is one of the invasive plants that are troublesome on district lands.*

## Prairie Conversion

The loss of native prairie is occurring at an alarming rate. Prairie is being converted for corn production to produce ethanol, which also has additional needs for irrigation water. An active role by the agricultural community, in partnership with conservation groups, would need to be taken to protect the federal Farm Bill and its conservation provisions, such as the Conservation Reserve Program and "Swampbuster" and "Sod Saver" provisions in the 1985 Farm Bill (amended 1990, 1996, 2002).

## Wildlife Management

Threatened and endangered species, predators, and wildlife disease are issues for the districts.

### *Threatened and Endangered Species*

The piper plover is a federally listed, threatened, shorebird. Breeding piping plovers occur in small numbers on numerous alkali wetlands in the Audubon, Crosby, and Lostwood wetland management districts. Endangered whooping cranes can be observed in the marshes across the districts. The primary issues related

to these and other species of concern center on the following: (1) monitoring populations; (2) monitoring habitat use; (3) identifying, securing, and maintaining essential habitat; and (4) developing habitat conditions in areas with potential for these species and that would promote increased recruitment or population protection to secure and increase their populations.

### *Predator Management*

Several species including red fox, coyote, striped skunk, Franklin's ground squirrel, mink, badger, and raccoon are found at higher than historical levels due to modifications of habitat and other factors. These species can adversely affect—primarily by predation on nests of grassland-nesting bird species—waterfowl and other migratory bird populations and reduce the likelihood of reaching wildlife population goals and objectives. The woody vegetation has a negative influence on grassland songbirds because it provides habitat for predators and attracts forest-edge bird species that may displace grassland species.

### *Wildlife Disease*

The districts administer migratory bird programs and have the lead role in addressing wildlife and, in particular, bird disease issues. Wetland management districts in North Dakota have a history of botulism outbreaks. Success in combating botulism occurs at the expense of other resources. There is the ongoing issue of striking a balance between providing optimal habitats, maintaining other district programs, and managing botulism.

## Visitor Services

Hunting, fishing, wildlife observation and photography, and environmental education and interpretation are uses currently authorized on lands administered by the districts. A growing demand for public recreation in North Dakota and the nation makes these six wildlife-dependent recreational uses, as specified in the National Wildlife Refuge System Improvement Act, a primary issue of interest. Some of the commenting public would like to see more opportunities to participate in not only the six wildlife-dependent recreational uses, but also in trapping.

## Operations

Funding and staff are not sufficient to fulfill the purposes and meet the goals of the districts. Identification of priorities and direction of resources efficiently will always be an issue for the districts. The Service's staff needs to identify and describe unfunded needs to be able to compete effectively for additional money from within the Service and from partners and other sources. District facilities need to be evaluated and upgraded.

## Monitoring and Research

Monitoring habitat and wildlife populations is an essential element in achieving the primary goals and objectives of the districts. Basic data about recruitment, mortality, and habitat use for a representative group of species must be collected and analyzed on a regular basis to make appropriate decisions that affect the habitats these species depend on. The use of the districts as a research field station could make valuable strides in development of new directions in management and expansion of the knowledge of field biologists.